

Abstract

A bucket conveying machine is disclosed which comprises a first working conveyor having a first upstream end and a second downstream end, said first conveyor being adapted to convey a plurality of buckets resting freely thereon from said first end to said second end, a second return conveyor adapted to return buckets from the second end of said first conveyor to the first end thereof, drive means for driving said first and second conveyors, first transfer means for transferring buckets from the first conveyor to the second conveyor at the second end, and second transfer means for transferring buckets from the second conveyor to the first conveyor at the first end.

The invention also comprehends a device for controlling the position of one or more buckets on a conveyor comprising a first conveyor adapted to convey a plurality of buckets thereon, a second conveyor provided at a station on the first conveyor, said second conveyor being disposed above the first conveyor, first transfer means for transferring buckets on the first conveyor on to the second conveyor at the station, such that the buckets are removed from the first conveyor, servo drive means for driving the said second conveyor to control the position of the buckets, and second transfer means for transferring buckets from the second conveyor back on to the first conveyor, or on to another conveyor.

A machine for collating product units is also disclosed which includes such a bucket conveying machine and one or more such devices for controlling the position of one or more buckets.

(FIG. 1)